



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,657	09/25/2003	Steven David Dunwoody	18061 (AT 20958-2114)	8366
7590	12/02/2004		EXAMINER	
Robert Kapalka Tyco Electronics Corporation Suite 140 4550 New Linden Hill Road Wilmington, DE 19808			HAMMOND, BRIGGITTE R	
			ART UNIT	PAPER NUMBER
			2833	
DATE MAILED: 12/02/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/670,657		DUNWOODY, STEVEN DAVID	
	<b>Examiner</b>		<b>Art Unit</b>	
	Brigitte R. Hammond		2833	<i>am</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 16 August 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION II

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10, 12-16 and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Gutierrez 6,585,540. Gutierrez discloses a modular receptacle jack 200 comprising:

a housing 33 comprising a jack interface (at 212) and an exterior surface (not numbered for sitting atop 260); and a shield 260 extending over at least a portion of said exterior surface, said shield comprising an interior face and an exterior face and signal conductors 608 extending therebetween; and a plurality of magnetic components 230 electrically coupled to said interior face for suppressing EMI/RFI in incoming and outgoing signals transmitted through the signal conductors (see col. 2 lines 30-34).

Regarding claim 2, said receptacle jack is an RJ-45 jack.

Regarding claims 3 and 4, at least some of said magnetic components 230 comprise a transformer element or capacitor (see col. 13, line 50-55).

Regarding claim 5, said shield comprises a printed circuit board.

Regarding claim 6, said shield comprises a printed circuit board comprising a ground 266.

Regarding claim 7, said jack further comprising a conductive shell 272 surrounding at least a portion of said jack, said shield coupled to said conductive shell.

Regarding claim 8, Gutierrez discloses a modular receptacle jack, comprising; a housing 202 comprising a jack receptacle and a plurality of signal contacts 294a, 294b within said receptacle, and a shield 260 extending over an outer surface of said housing, said shield 260 comprising a printed circuit board and a plurality of magnetic components 230 coupled to a surface of said printed circuit board for suppressing EMI transmission by said contacts.

In reference to the recitation for suppressing EMI transmission by said contacts as signals pass from the signal contacts within the housing to an external space and as signals pass from the external space to the signal contacts", this recitation is seen to only recite the function and carries little patentable weight. Further, the recitation is not seen to claim any structure that prevents the reference from being used for the same function. Especially since the reference states that the purpose of the invention is to provide enhanced external noise suppression and signal filtering, (col. 2, lines 35-40 and col. 2, line 30, respectively).

Regarding claim 9, Gutierrez discloses said shield comprises opposite surfaces, and a conductive path extending from one of said surfaces to the other of said surfaces of said printed circuit board, as shown in fig. 6.

Regarding claim 10, Gutierrez discloses said contacts being electrically coupled to an inner surface of said printed circuit board plane (see col. 10, lines 1-10).

Regarding claim 12, Gutierrez discloses said receptacle jack is an RJ-45 jack (see col. 2, lines 55-60).

Regarding claim 13, Gutierrez discloses a modular receptacle jack comprising: a housing 202 comprising a jack receptacle and a plurality of signal contacts 220a within said receptacle; and a shield 260 extending over an outer surface of said housing, said shield comprising a printed circuit board having at least one aperture therethrough for passage of a signal conductor, and at least one magnetic component 230 coupled to a surface of said printed circuit board adjacent said aperture for suppressing EMI transmission therethrough.

In reference to the recitation "thereby providing clean bi-directional communication through said signal contacts while avoiding common impedance coupling of said signal contacts" this recitation is seen to only recite the function and carries little patentable weight. Further, the recitation is not seen to claim any structure that prevents the reference from being used for the same function.

Regarding claim 14, Gutierrez discloses said shield 260 comprises opposite surfaces, said signal conductor extending from one of said surfaces to the other of said surfaces of said printed circuit board (as shown in fig. 2d).

Regarding claim 15, Gutierrez discloses said shield 260 comprises a plurality of apertures and signal conductors corresponding to each of said signal contacts, each of said signal contacts electrically coupled to one of said signal conductors.

Art Unit: 2833

Regarding claim 16, Gutierrez discloses a plurality of magnetic components 230 coupled to a surface of said shield, said magnetic components suppressing EMI/RFI transmission through each of said plurality of signal conductors.

Regarding claim 18, Gutierrez discloses said receptacle jack is an RJ-45 jack.

Regarding claim 19, Gutierrez discloses said modular jack further comprising a conductive shell 272 surrounding a portion of said housing, said shield 260 coupled to said conductive shell 272.

Regarding claim 20, Gutierrez discloses said modular jack further comprising a conductive shell 272 surrounding a portion of said housing, said shell having ground fingers 277 electrically contacting said shield.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gutierrez et al. in view of Belopolsky 6036547. Gutierrez et al. discloses the invention substantially as claimed. Gutierrez et al. do not disclose said contacts being arranged in differential pairs. However, Belopolsky disclose contacts being arranged in differential pairs to reduce cross-talk (see col. 2, lines 35-45). Therefore, it would have been obvious to one of ordinary skill to modify the jack of Gutierrez et al. by arranging the contacts in differential pairs to reduce cross-talk as taught by Belopolsky.

### ***Response to Arguments***

Applicant's arguments filed August 16, 2004 have been fully considered but they are not persuasive. In response to applicant's argument that "nowhere does Guitierrez et al. state that the component packages suppress incoming/outgoing signals" nor state that "the filtering is performed to address EMI/RFI issues in incoming/outgoing signals". The Examiner disagrees. The undesirable noise being suppressed by Guitierrez et al. is electromagnetic in nature. Therefore by definition this is electro magnetic interference (EMI). Therefore the rejection stands.

In response to applicant's argument that Guitierrez et al. does not describe "clean bi-directional communication through said signal contacts nor avoid common impedance coupling of said signal contacts" this recitation is seen to only recite the function and carries little patentable weight. Further, the recitation is not seen to claim any structure that prevents the reference from being used for the same function. Therefore the rejection stands.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any



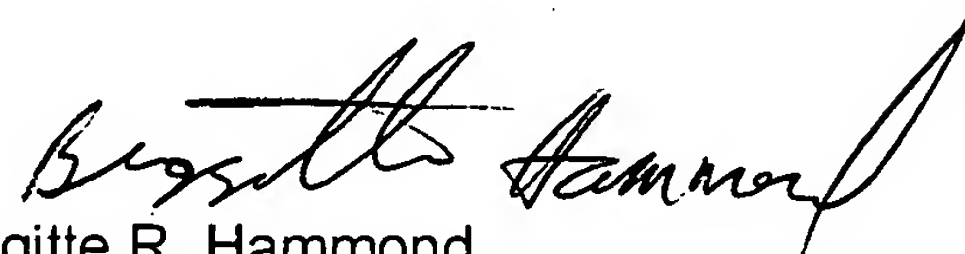
Art Unit: 2833

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brigitte R. Hammond whose telephone number is 571-272-2006. The examiner can normally be reached on Mon.-Thurs. and Alternate Fridays from 7:30-5:0000.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A Bradley can be reached on 571-272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Brigitte R. Hammond  
Examiner  
Art Unit 2833

November 26, 2004